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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/609,895	06/30/2003	Dustin Alan Cochran	STL 3315	3896
36521	7590	08/11/2005	EXAMINER	
MOSER, PATTERSON & SHERIDAN LLP/ SEAGATE TECHNOLOGY LLC 595 SHREWSBURY AVENUE SUITE 100 SHREWSBURY, NJ 07702			ZHENG, LOIS L	
			ART UNIT	PAPER NUMBER
			1742	

DATE MAILED: 08/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/609,895

Applicant(s)

COCHRAN, DUSTIN ALAN

Examiner

Lois Zheng

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 10-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 19-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6 October 2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-9 and 19-22, drawn to an apparatus, classified in class 204, subclass 224M.
  - II. Claims 10-18, drawn to a process, classified in class 205, subclass 640.
2. Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the claimed apparatus can be used to practice another materially different process such as a process that grooves a cylinder.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Raghunath Minisandram on 17 June 2005 a provisional election was made with traverse to prosecute the invention of group I, claims 1-9 and 19-22. Affirmation of this election must be made by applicant in replying to this Office action. Claims 10-18 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

### ***Means-Plus-Function Language***

5. Instant claims 19-21 contain the flowing terms written in means-plus-function format, and have been interpreted as follows:

"means for holding the working surface about an axis" (claim 19) is in proper means-plus-function format and is defined in instant claim 1 lines 3-6.

"means for pumping electrolyte" (claim 19) is in proper means-plus-function format and is defined in specification at page 9 paragraphs 33, Fig. 4 numeral 416 and 418.

"means for supporting the electrode" (claims 19) is in proper means-plus-function format and is defined in specification at page 8-9 paragraphs 29, Fig. 3.

"means for biasing the electrode surface toward the working surface" (claim 19-21) is in proper means-plus-function format and is defined in specification at page 8 paragraph 27, Fig. 3.

### ***Double Patenting***

6. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

7. Claims 1, 3, 5, 8 and 19-20 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-15 of prior U.S. Patent No. 6,764,590

B1(Cochran'590). This is a double patenting rejection.

Art Unit: 1742

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: The claims 1-15 of Cochran'590 teaches an electrochemical machining apparatus comprising the claimed frame for holding a conical workpiece, the claimed source of electrolyte to be pumped at a fixed pressure rate, the claimed fixture for supporting the electrode for movement with minimal frictional restriction and the claimed force biasing the electrode surface toward the inner surface of the conical element. Cochran'590 further teaches claimed force applying pressure against the distal end of the electrode and the claimed source of electric potential to be applied between the electrode and the workpiece. Note: The examiner is construing the cone as recited in claim 1 of Cochran'590 to be the conical bearing which is also recited in claim 1 of Cochran'590, which inherently reads on the instantly claimed conical element.

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Art Unit: 1742

9. Claims 2, 4, 6-7, 9 and 21-22 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of US Patent No. 6,764,590 B1 (Cochran'590). Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-15 of Cochran'590 also teaches an electrochemical machining apparatus that is substantially the same in structure as the instant invention (i.e. frame for workpiece, source of electrolyte, fixture for supporting the electrode and force to bias the electrode toward the workpiece) and uses the counteracting forces from pressurized air and electrolyte to achieve the preferable critical orifice. Cochran'590 further teaches an aerostatic slide assembly for supporting the electrode. Even though Cochran'590 does not explicitly teach that the aerostatic slide assembly is a hydrostatic bearing cartridge assembly and the pressurized air is provided by a substantially frictionless air cylinder, it would have been obvious to one of ordinary skill in the art to have incorporated the hydrostatic bearing cartridge and the frictionless air cylinder since the aerostatic slide assembly of Cochran'590 performs the same function as the hydrostatic bearing cartridge of the instant invention and the claimed substantially frictionless air cylinder would have been obvious to one of ordinary skill in the art to have been inherently present in the apparatus of Cochran'590 since Cochran'590 also teaches pressurized air is applied to the distal end of the electrode.

10. Claims 1-9 and 19-22 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3, 8-10, 13-15, 18-19 and 21 of co-pending application 10/464,581. Although the

Art Unit: 1742

conflicting claims are not identical, they are not patentably distinct from each other because 10/464,581 also teaches an electrochemical machining apparatus comprising a hydrostatic bearing cartridge and using the counteracting forces from pressurized air and electrolyte to achieve the preferable critical orifice. Even though 10/464,581 does not explicitly teach the claimed frame for holding the workpiece, one of ordinary skill in the art would have found the claimed frame obvious since workpiece will need to be secured for the electrochemical machining to take place.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lois Zheng whose telephone number is (571) 272-1248. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1742

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LLZ

  
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